

a heat exchanger, including a plurality of tube packets, in a fluidized bed for releasing heat evolved from an exothermic reaction to a heat-transfer medium in the tube packets, to water/steam; and

B2 a ring pipe, wherein the tube packets come into contact with the water distributed via the ring pipe and the steam removed via the ring pipe, wherein the ring pipe is mounted as a distribution or collection chamber on a wall of the reactor.

B3 5. (Amended) The fluidized-bed reactor as claimed in claim 1, wherein the reactor is substantially rectangular in cross-section.

7. (Amended) The fluidized-bed reactor as claimed in claim 1, wherein the chamber is essentially circular in cross-section.

B4 8. (Amended) The fluidized-bed reactor as claimed in claim 1, further comprising holes for connecting the pipes said holes for defining a desired pressure loss and hence for ensuring uniform flows over the tube packets.

9. A process for the oxychlorination of ethylene, oxygen and HCl, said reactor providing the steps of:

providing a fluidized bed reactor;

providing a heat exchanger, including a plurality of tube packets, in the fluidized bed for releasing heat evolved from an exothermic reaction to a heat-transfer medium in the tube packets, to water/steam; and